## IMPERIAL ROOFING TILES

A SERIES OF SPECIFICATIONS AND DETAILS FOR ROOFING TILES

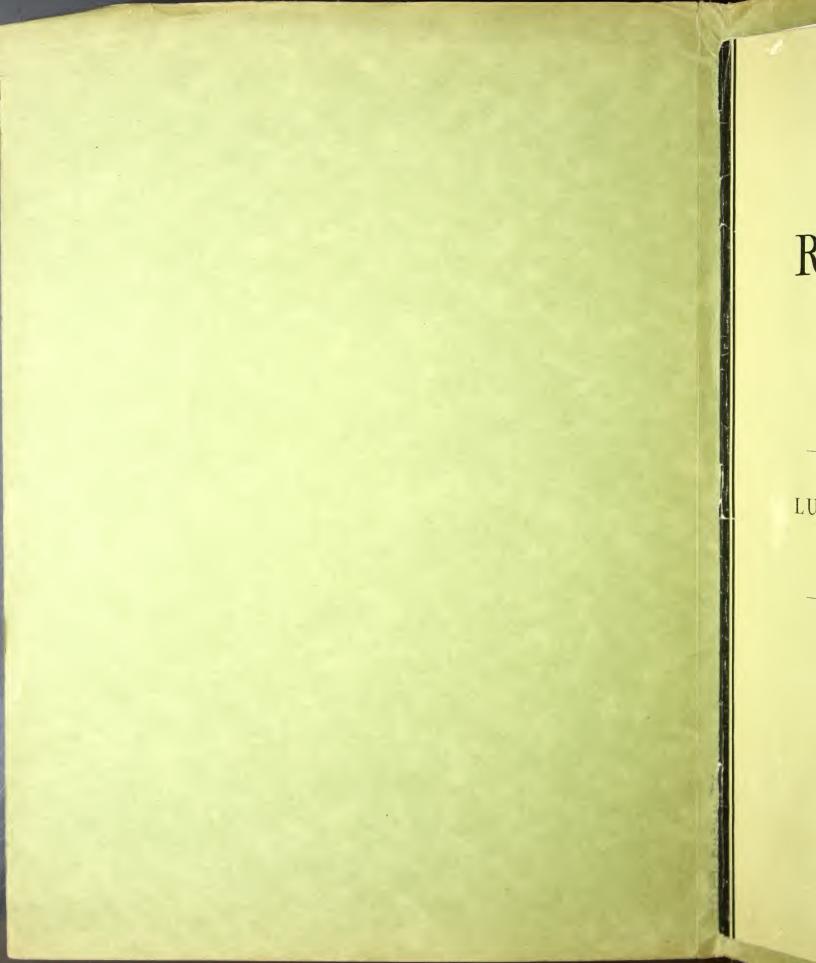
## LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roofing Tiles

CHICAGO 104 SOUTH MICHIGAN AVENUE

NEW YORK

WASHINGTON 565 FIFTH AVENUE 738 FIFTEENTH STREET, N. W.



## IMPERIAL ROOFING TILES

A SERIES OF

SPECIFICATIONS AND DETAILS FOR

ROOFING TILES

## LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roohing Tiles

CHICAGO

104 SOUTH MICHIGAN AVENUE

NEW YORK
565 FIFTH AVENUE

WASHINGTON
738 FIFTEENTH STREET, N W.

Makers of IMPERIAL Chimney Pots

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

## CHIMNEY POTS

Chimney pots are made in various textures and colors especially adapted to use with our weathered effect tiles. They are also available in glazed colors for the modern treatment.



C.P.200



C.P.500, 510 and 520



SCHEDULE OF SIZES



C P,600, 610, 620, 630, 640, 650 and 660

	000000	0 2323 0			
NUMBER		CER	BAFE	1	HEIGHT
C.P 200.	73"	274	_13 "x1	3"	15"
C 1 300	8 *	Dat	.14 "		18"
CP 310	12 "	Dia	18 "		.21
CP 320	_15 "	Dia	21 "		-25"
C.P. 400	8 "	Dis	141"		.25"
C I 410	12 "	Dia	182		.29"
C F 420	-15 "	Dia	21 "		32
C-P.500	8 "		14 "		.15"
C I 510	_12 "	Dia	18 "		.18
C 1 520	15 "	Dis	_21 " _		.22"
C I 600			13 '		.15"
C F 610	-12 *		15 "		.18"
CJ: 620	-15 "	Dia	18 "		.20"
C 1 630	18 "	DA			.23"
C-1 640	23 *	Din	26 "		30"
· ( 1' (50)	. 8 7			5"	20"
°C.P.060	12 "		15 "x2	0"	.30"
		*Fillestical			



C.P. 400, 410 and 420



C.P.300 310 and 320

NEW

Hard b most severe Our nea information may be see request. Estimat

and specifica Experie ing difficult We are material is p are equipped partment de and ancient

flexible prod Variety plishing plea Shingle

Chimney

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO COFFEYVILLE, KANSAS - PERU, KANSAS

## IMPERIAL ROOFING TILES

Produced since 1875.

Hard burned to afford enduring protection under the most severe weather conditions encountered.

Our nearest sales office will furnish samples or give information as to where displays or typical in tallations may be seen. Photographs of representative work on request.

Estimates promptly furnished from architect plans and specifications.

Experienced service available for assistance in solving difficult roofing problem

We are singularly well equipped to furnish tiles of quality. Our manufacture is carried on where the raw material is peculiarly adapted to the purpose; our plant are equipped with modern machinery; our research department develops methods for producing both modern

and ancient effects at minimum cost. Large output and flexible production as are service on all operations.

Variety of product affords wide latitude in accomplishing pleasing root effects.

Shingle tiles are produced in a variety of sizes value

and texture. Britting Shingles may be so applied as faithfully to resemble ancient roots of burned clay or stone, which are so interesting to the traveller in France. and England. Crude Shingles are moulded duplicates of early original French tiles. Antique Shingles, more irregular, are ideal for the low rambling English design country house, Colonial Shingles, in texture and color, are remarkably like old split wood shugles. The Provincial Shingle, an inespensive yet artistic pattern, is used in its dull colored and weathered effects to subdue the roof, or in a range of brighter tones to give it accent. Yale Memorial tiles, as used on the Harkness Memorial Quadrangle at Yale University, on the New Duke University group, and other prominent buildings, especially lend themselves to the furthering of individual expression in a conservative manuel.

Climet Shingle, English Shingle, French, Mission, Spanish, Roman and Grook tiles are offered in narroral rods and fireflashed shades, or glossed in practically any cultur. They are also postured in various textures, in-

cluding weathered surface effects

## SHOW ROOMS

CHICAGO 104 South Michigan Avenue CINCINNATI 622 Broadway NJ.W YORK 565 130th Assenue ROSTON L. Stanley Ware Company 120 South Boylaton Stood WASHINGTON 7JS I disenth Steer, N.W. PHILADELPHIA 1JII Walnut Street

## ARCHITECTURAL EXHIBITS

INDIANAPOLIS
Architects Exhibit Building
DETROIT
Barlum Tower, Cadillas Square

51 LOUIS Accade Building CLEVILAND Harma Building NEW YORK. 101 Park Avenus 60000ELVN Brenklyn Dudy Fagin Building

	INI	) E X	
l'attern	Page	Pactern	19
Chimney Pot	1	Garden Walls Edging	
Shingle Tile		Mission Tiles	
Shingle Tile	-1	Mission The	
Shingle Tile	8	Mission Tiles	
Shingle Tiles	0	Montena Tibes	
Shingle Tile	7.	Mileson TDes	
Shingle Tile	1.60	Mission Tiles	
Interlocking Shingle Lifes	9	Soumals Tites	
Interlocking Shingle Tiles	10.	Spanish Tiles	
Interlocking Shingle Tiles	11	Spanish Tites	
Interlocking Shinele Tile-	12	Spanish Tiles	
French Tile	1.3	Roman and Gwek Tiles	
French Tiles	14	Roman and Greek Ties	
French Tiles	15.	Raman and Greek Tiles	
Tile Slahn and Tile Hagging	16	Floor Liber	

If additional copies of this catalogue are desired, please write

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

## SHINGLE TILES

These patterns are available in a range of colors in a variety of surface textures

## SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications.

Note: Words in italics enclosed within parentheses are selective to suit particular condition. Include or omit as required.

Note: Clauses are selective. Include or omit as they apply.



(1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial (specify pattern) Shingle tiles and fittings of (specify) color.

(1b) (Hips) (and) (valleys) shall be cut before burning.

## (2) Nails

All nails for flashings and tiles shall be copper.

## (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 2½" horizontally and 6" vertically. Fasten with large-headed galvanized nails.

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

## (4) Wood Strips

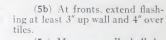
(4a) Provide 3" x 1" cant strips at eaves and 1" stringers of necessary height under (hip rolls and) ridges.

(4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit tiles.

Note: Include (4b) if roof base is concrete.

## (5) Flashings

(5a) At sides of vertical surfaces, insert base flashing between each course of tiles. Lap 3" and extend 4" under tiles and at least 6" up wall.



(5c) Masonry wall shall be cap flashed and pointed.

(5d) Where tile and metal roofs intersect, extend metal up tile roof 12" or more.

(5e) Extend gutter metal up roof to a point higher than outer edge of gutter.

(5f) Open Valleys—Line valleys with 16 oz. copper at least 20" wide. Turn edge over \dangle". Lap joints at least 4". Fasten with cleats. Do not solder.

(5g) Closed Valleys—Flash between each course of tiles with 16" strips of same length as tiles.

(5h) Rounded Valleys—Flash between each course of tiles with curved strips of same length as tiles. Extend strips 8" beyond the curve at either side of valley.

## (6) Laying

(6a) Lay tiles (regular) (irregular) with (specify) average exposure and not less than 2" head lap on the third course. Double tiles at eave. Fasten with (1\frac{1}{4}") (1\frac{3}{4}") (specify) copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement.

Note: Select whether regular or irregular and specify 1½" nails for ¾" shingles; 1¾" nails for ¾" shingles; longer for thicker shingles.

(6b) Leave opening of 6" or more across valleys.

(6c) Cement end bands in laps.

(6d) Cement hip rolls in laps and fasten with 2" copper nails.

(6e) Cement ridges in laps and fasten with 21" copper nails.

(6f) Where tiles join hip stringers make waterproof with elastic cement.

(6g) Cement small pieces of graduated tiles solidly with elastic cement.

Note: Include (6g) on circular roofs.

(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

Details concerning any roofing problem furnished on request. If additional copies of this catalogue are desired, please write.

# LUDOWICI-CELADON COMPANY ALA FILE NUMBE

# IMPERIAL SHINGLE TILES



Length
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			PU 20		_	_
	12	5		LC.	4	1840 lbs
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_			Thickness	Average exposure7"x5	Average pieces per square	Average weight per square
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# IMPERIAL SHINGLE TILES

ANTIQUE





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ss exposure $6_k^{1,n}$ , pieces per square 41	gth				12 "
exposure 6½"x.  Pieces per square 4t	Ith				010
exposure 6½″x pieces per square 40	ckness .				10.40
pieces per square	rage exposure			0	"x5"
	verage pieces per squ	Jare , -			460

# IMPERIAL SHINGLE TILES

COLONIAL



Average pieces per square. Average weight per square.

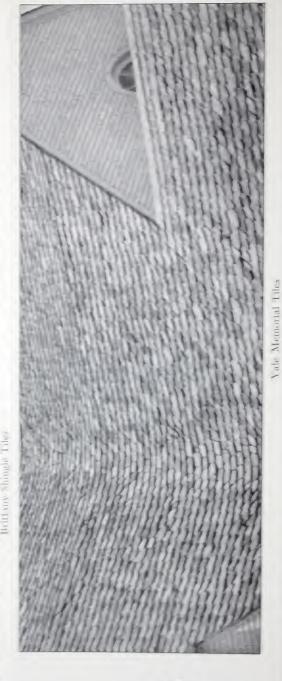
Average exposure. Thickness. Length...



YALE MEMORIAL

Lengths..... Widths..... Thicknesses.









SCALE  $1\frac{1}{2}'' = 1'-0''$ 

## IMPORTANT DATA

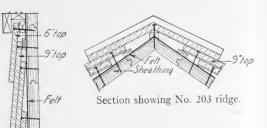
3" FLAT SHINGLE TILES



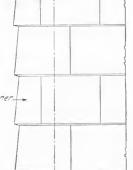
Length	12"
Width	
Average exposure	6"x5"
Average pieces per square	480
Average weight per square. 1	225 lbs.
5" SLAP SHINGLE THE	25



-			
3 //	Flat	Shingle	Tile.





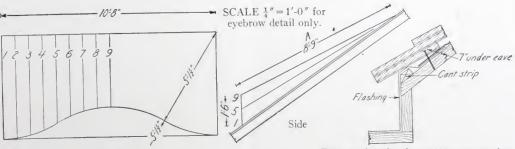


6 under eave Flashing Cant strip

Section A-A.

Cross section showing valley flashing on wood roof base. See specifications.

Elevation showing  $\frac{3}{8}$ " Flat Shingle Tiles.



Front

Eave section showing gutter construction.

Eyebrow dormers must be constructed as shown above for \$" Slab Shingle Tiles. Rafters and sheathing must show a straight line from the curved eave to the point directly above where it joins main roof and on a line with the point where center line of eyebrow meets main roof. See front elevation.

Larger or smaller effects can be secured providing

vertical height and radius shown are increased or decreased proportionately. Distance "A" should not be decreased and it must be increased when roof pitch is steeper than 12" rise in 12" run.

Crowd tiles at top of dormer and spread them at eave. Shorten exposure of tiles as they leave main roof until tail lines of tiles on both surfaces are aligned.

0

## LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO - COFFEYVILLE, KANSAS - PERU, KANSAS

## INTERLOCKING SHINGLE TILES



CLOSED SHINGLE

These patterns are available in a range of colors in a variety of surface textures.



ENGLISH SHINGLE

## SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications.

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## (1) Tiles

(1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial (Closed) (English) Shingle tiles and fittings of (specify) color.

(1b) (Hips) (and) (valleys) shall be cut before burning.

## (2) Nails

All nails for flashings and tiles shall be copper.

## (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 2½" horizontally and 6" vertically. Fasten with large-headed galvanized nails

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

## (4) Wood Strips

(4a) Provide \$\frac{1}{4}"\$ x 1" cant strips at eaves.
Note: Include (4a) if English Shingles are specified.
(4b) Provide 1" stringers of necessary height under

(hip rolls and) ridges.

(4c) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit tiles

Note: Include (4c) if roof base is concrete.

## (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \( \frac{1}{4}" \). Lap joints at least 4". Fasten with cleats. Do not solder.

(5b) At sides of vertical surfaces, extend base flashing at least 6" up wall, 5" under tiles and turn up edge 1"

(5c) At fronts, extend flashing at least 3" up wall and 4" over tiles.

(5d) Masonry wall shall be cap flashed and pointed.

(5e) Where tile and metal roofs intersect, extend metal up tile roof  $12^{\prime\prime}$  or more.

(5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

## (6) Laying

(6a) Lay tiles to straight lines, parallel and at right angles to eaves, lapped 3". Fasten with 2" copper nails. Fasten tiles overlapping sheet metal with copper wire and

(6b) Leave opening of 6" or more across valleys.

(6c) Cement gable rakes to field tiles and fasten with 2" copper nails.

(6d) Cement hip rolls in laps and fasten with 2" copper nails.

(6e) Cement ridges in laps and fasten with 21/2" copper nails.

(6f) Where tiles join hip stringers make waterproof with elastic cement.

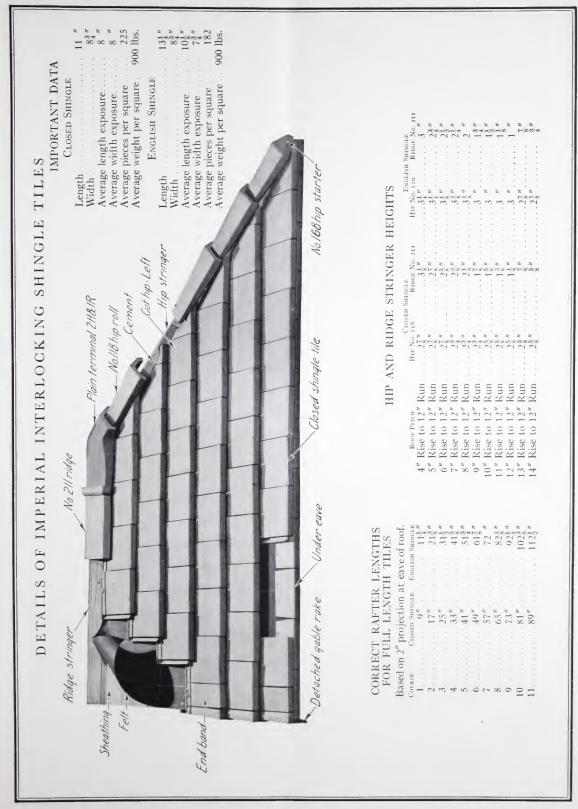
(6g) Cement small pieces of graduated tiles solidly with elastic cement.

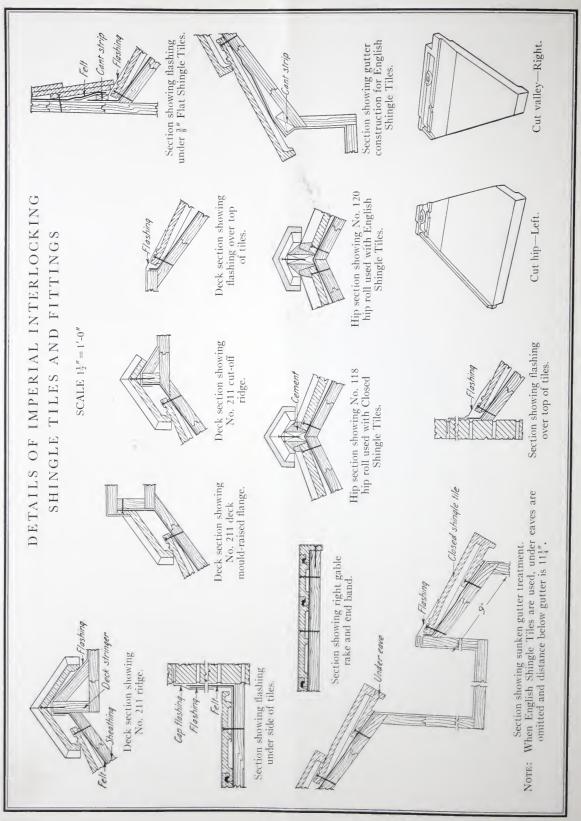
Note: Include (6g) on circular roofs.

(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

Details concerning any roofing problem furnished on request. If additional copies of this catalogue are desired, please write.





Plaster i Vertical st

Eyebroi above for must show the point on a line weets ma Larger

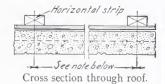
## DETAILS OF IMPERIAL INTERLOCKING SHINGLE TILES AND FITTINGS

APPLICATION OVER CONCRETE SCALE  $1\frac{1}{2}$ " = 1'-0"



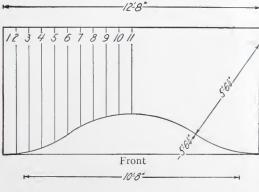
Section showing valley flashing on concrete roof base.

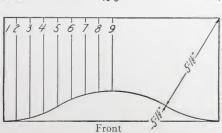




Application of wood strips to concrete roof base. Exact spacing of horizontal strips determined by shade of tiles.

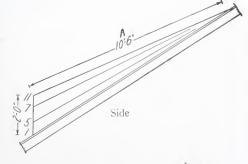
DIAGRAM OF EYEBROW DORMERS SCALE  $\frac{1}{4}'' = 1' \cdot 0''$ 

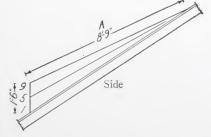




Eyebrow dormers must be constructed as shown above for Closed Shingle Tiles. Rafters and sheathing must show a straight line from the curved eave to the point directly above where it joins main roof and on a line with the point where center line of eyebrow meets main roof. See front elevation.

Larger or smaller effects can be secured providing





vertical height and radii shown are increased or decreased proportionately. Distance "A" should not be decreased and it must be increased when roof pitch is steeper than 12" rise in 12" run.

Note: For English Shingle tiles, eyebrow width and distance "A" must be increased 2'-0". The height remains the same.

Continued on next page

ETAILS

## LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

## FRENCH TILES

This pattern is available in a range of colors

## SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications.

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Note: Clauses are selective. Include or omit as they apply.

## (1) Tiles

(1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial French tiles and fittings of (specify) color.

(1b) (Hips) (and) (valleys) shall be cut before burning.

## (2) Nails

All nails for flashings and tiles shall be copper.

### (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 23 horizontally and 6" vertically. Fasten with large-headed galvanized nails

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

## (4) Wood Strips

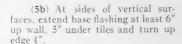
(4a) Provide 1½"x2" cant strips at eaves and 1" stringers of necessary height under (hip rolls and) ridges.

(4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit tiles.

Note: Include (4b) if roof base is concrete.

## (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \( \frac{1}{2} \)". Lap joints at least 4". Fasten with cleats. Do not solder.



- (5c) At fronts, extend flashing at least 3" up wall and 4" over tiles.
- (5d) Masonry wall shall be cap flashed and pointed.
- (5e) Where tile and metal roofs intersect, extend metal up tile roof 12" or more.
- (5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

## (6) Laying

(6a) Lay tiles to straight lines, parallel and at right angles to eaves, lapped 3". Fasten with 2½" copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement.

## (6b) Leave opening of 6" or more across valleys.

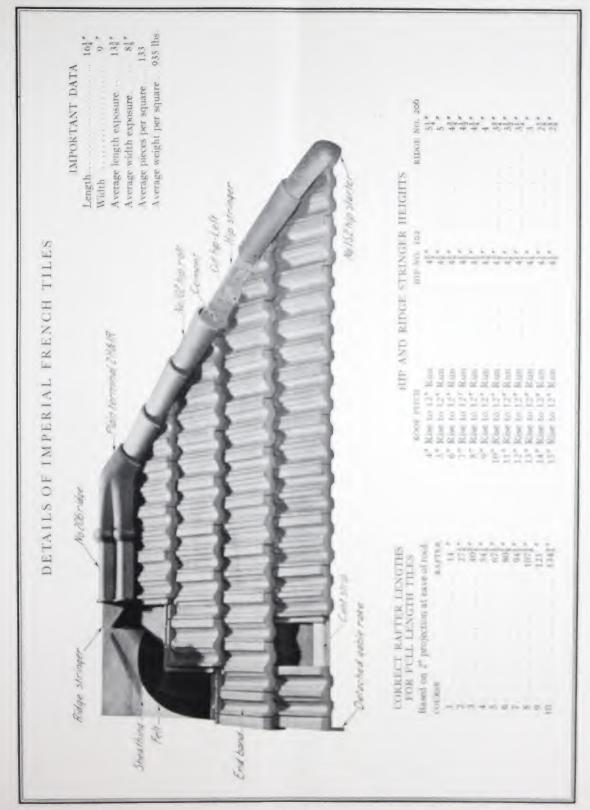
- (6c) Cement gable rakes to field tiles and fasten with 2" copper nails.
- (6d) Cement hip rolls in laps and fasten with 2" copper nails.
- (6e) Cement ridges in laps and fasten with 2½" copper nails.
- (6f) Where tiles join hip stringers make waterproof with elastic cement.
- (6g) Cement small pieces of graduated tiles solidly with elastic cement.

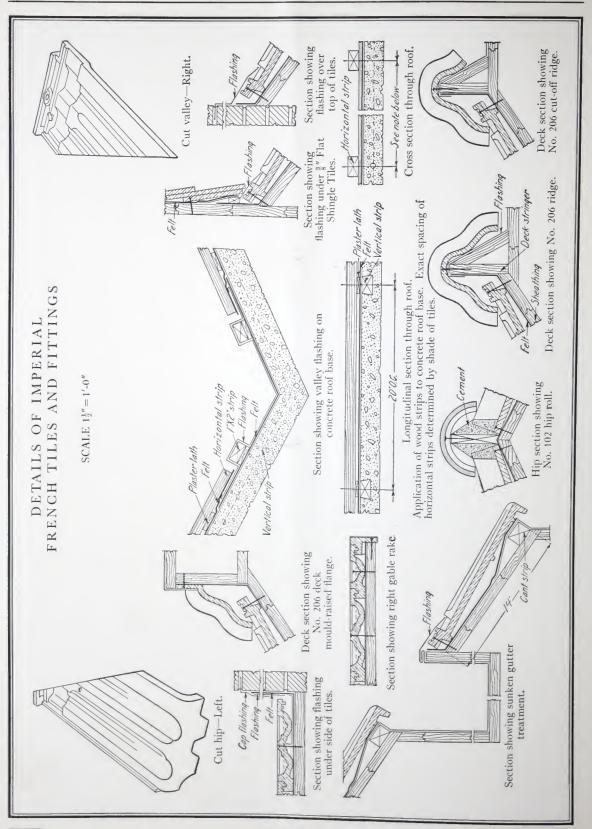
Note: Include (6g) on circular roofs.

- (6h) Cement all tiles in laps, using 40 lbs. of elastic cement per square.
- (6i) Copper clamp shall be placed in side lock of each tile at point directly above head of tile below. Nail clamp to roof base.

Note: Include either (6h) or (6i) on high buildings.

Details concerning any roofing problem furnished on request. If additional copies of this catalogue are desired, please write.





SWEET'S

PAGE 15

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NEW

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO-COPPETVILLE, KANAS-FERD, KASOAS

## TILE SLABS



In addition to shale red colors, tile slabs are manufactured in a range of browns and fire-flashed shales.

A complete line of tile slab fittings is available.

## NUMBER OF PIECES PER SQUARE

fortar Joint	6"16"11"	65,9515	0507a11
4"	384	258	173
14	350	250	105
1	453	241	7.64
10	841	(34	160



6"x9"x1"



6"20"41"



## GARDEN WALK EDGING

Made in red, fire flashed and black. Placed in the ground along walks or driveways it makes an interesting and practical edging for lawns or flower borders.

TILE FLAGGING

Made in a variety of colors. The teature suggests that of old stone flagging. Size approximately 9"x12"x11".



Continued on manifestation

# DETAILS OF IMPERIAL FITTINGS FRAIGHT BARREL MISSION TILES AND FITTINGS

## LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

## MISSION TILES

These patterns are available in a range of colors in a variety of surface textures

## SPECIFICATIONS

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Note: Clauses are selective. Include or omit as they apply.



(5b) At sides of vertical surfaces, extend base flashing at least 6" up wall, 4" under tiles and turn up edge 2".

(5c) At fronts, extend flashing at least 3" up wall and 4" over tiles.

(5d) Masonry wall shall be cap flashed and pointed.

## (1) Tiles

(1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial (specify pattern) Mission Tiles and fittings of (specify) color.

(1b) Covers shall be used as (hip roll and) ridge.
 (1c) (Hips shall be cut) (and) valleys shall be cut and closed before burning.

## (2) Nails

All nails for flashings and tiles shall be copper.

## (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 2½" horizontally and 6" vertically. Fasten with large-headed galvanized

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

## (4) Wood Strips

(4a) Provide 1" strips of necessary height under covers (hip rolls) and ridges.

(4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit pan tiles.

Note: Include (4b) if roof base is concrete.

## (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \( \frac{1}{4} \)". Lap joints at least 4". Fasten with cleats. Do not solder.

(5e) Where tile and metal roofs intersect, extend metal up tile roof 12" or more.

(5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

## (6) Laying

(6a) Lay tiles (regular) (irregular) exposure with not less than 3" lap. Fasten with 2" copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement

(6b) Irregular Effect—Lay pans at actual exposure. Vary exposures of covers to avoid horizontal and diagonal lines using 10% additional covers.

(6c) Leave opening of 6" or more across valleys.

(6d) Cement gable rakes to field tiles and fasten with  $2\frac{1}{2}$ " copper nails.

(6e) Cement (hip rolls) (and) (ridges) in laps and fasten with  $2\frac{1}{2}$  "copper nails.

(6f) Where tiles join hip stringers make waterproof with elastic cement.

(6g) Cement small pieces of graduated tiles solidly with elastic cement.

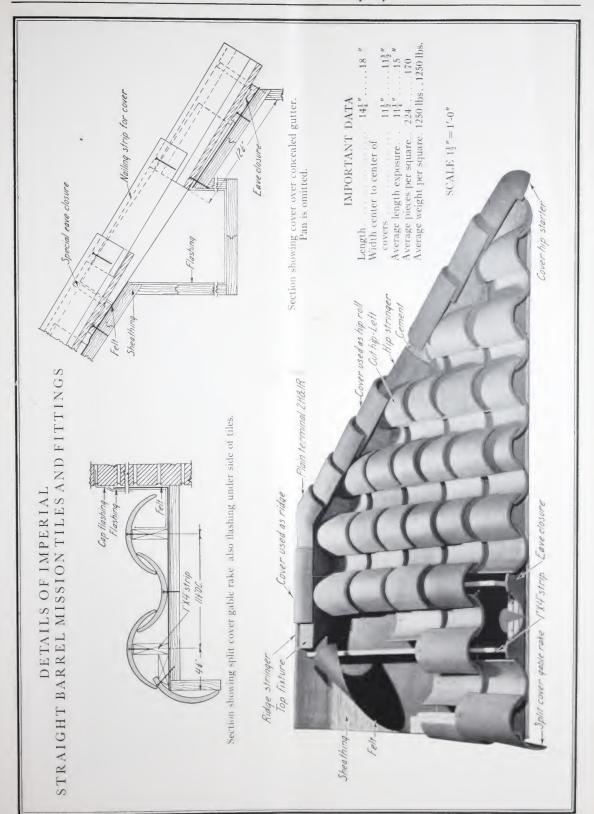
Note: Include (6g) on circular roofs.

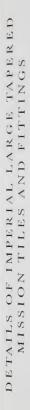
(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

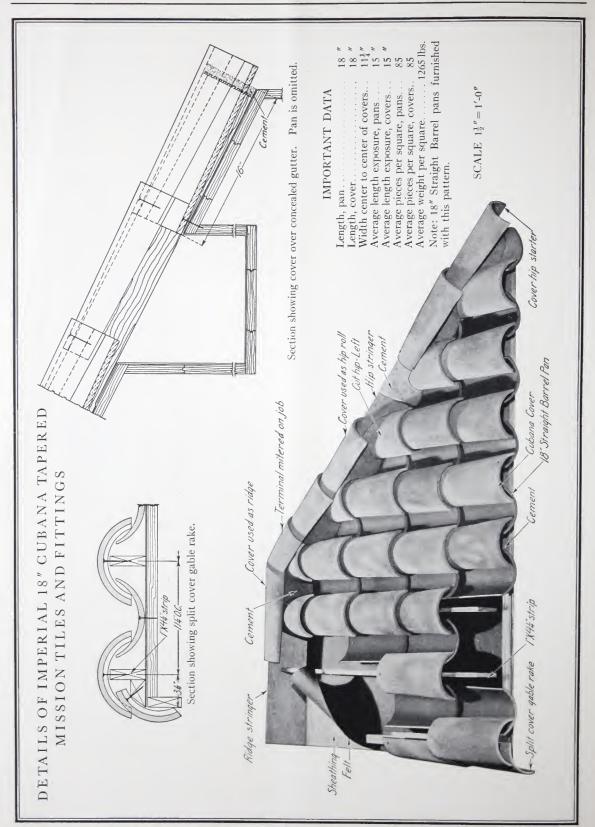
Details concerning any roofing problem furnished on request. If additional copies of this catalogue are desired, please write.







IMPORTANT DATA



## TAPERED MISSION TILES AND FITTINGS DETAILS OF IMPERIAL LARGE

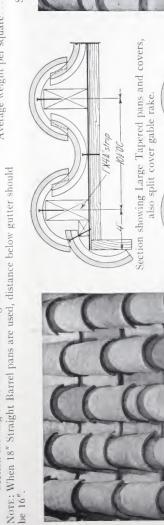
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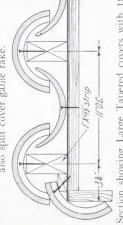
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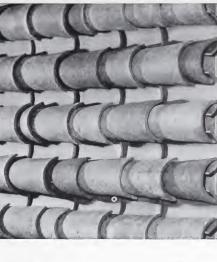
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Section showing Large Tapered covers with 18" Straight Barrel pans, also split cover gable rake.



Large Tapered covers and Straight Barrel pans.

Section showing cover over concealed gutter. Pan is omitted.

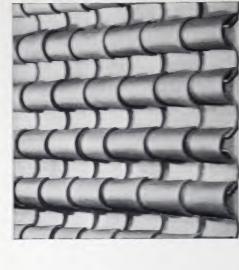
# DETAILS OF IMPERIAL SMALL TAPERED MISSION TILES AND FITTINGS

## IMPORTANT DATA

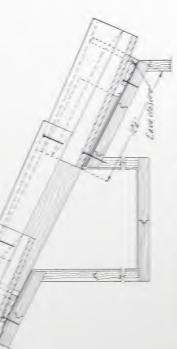
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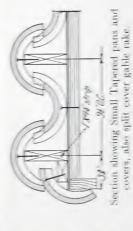


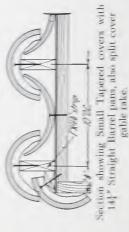


Small Tapered covers and Straight Barrel pans.



Section showing cover over concealed gutter, Pan is omitted.







Small Tapered pans and covers

1350 lbs

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## ROOFING-TILES, CLAY, IMPERIAL LUDOWICL CELADON COMPANY

## DETAILS OF IMPERIAL 18" TAPERED MISSION TILES AND FITTINGS

## IMPORTANT DATA

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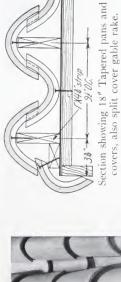
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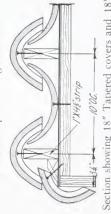
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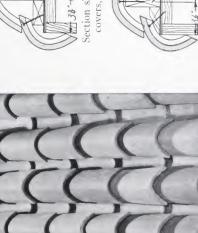
18" Tapered covers and Straight Barrel pans.



gable rake.



Section showing 18" Tapered covers and 18" Straight Barrel pans, also split cover



18" Tapered pans and covers.

Section showing cover over concealed gutter. Pan is omitted.

Note: When 18" Straight Barrel pans are used distance below gutter should be 16".

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

## SPANISH TILES

This pattern is available in a range of colors in a variety of surface textures

## SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications.

Note: Words in italics enclosed within parentheses are selective to suit particular condition. Include or omit as required.

Note: Clauses are selective. Include or omit as they apply.



## (5b) At sides of vertical surfaces, extend base flashing at least 6" up wall, 4" under tiles and turn up edge 1½".

- (5c) At fronts, extend flashing at least 3" up wall and 4" over tiles.
- (5d) Masonry wall shall be cap flashed and pointed.

## Tiles (1a) Cover roofs so indicated with Ludowici-Celadon (5e) Where tile and metal roofs intersect, extend metal up tile roof 12" or more.

(5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

## (2) Nails

closed before burning.

All nails for flashings and tiles shall be copper.

Company's Imperial Spanish tiles and fittings of (specify)

(1b) (Hips shall be cut) (and) valleys shall be cut and

### (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to caves. Lap 2½" horizontally and 6" vertically. Fasten with large-headed galvanized nails

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

## (4) Wood Strips

(4a) Provide 1" x 2" strips under end bands and 1" stringers of necessary height under (hip rolls and) ridges.

(4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit tiles.

Note: Include (4b) if roof base is concrete.

## (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \". Lap joints at least 4". Fasten with cleats. Do not solder.

## (6) Laying

(6a) Lay tiles to straight lines, parallel and at right angles to eaves, lapped 3". Fasten with 1½" copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement.

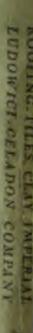
- (6b) Leave opening of 6" or more across valleys.
- (6c) Cement gable rakes to field tiles and fasten with  $2\frac{1}{2}$ " copper nails.
- (6d) Cement hip rolls in laps and fasten with 2" copper nails.
- (6e) Cement ridges in laps and fasten with  $2\frac{\pi}{2}$  copper nails.
- (6f) Where tiles join hip stringers make waterproof with elastic cement.
- (6g) Cement small pieces of graduated tiles solidly with elastic cement.

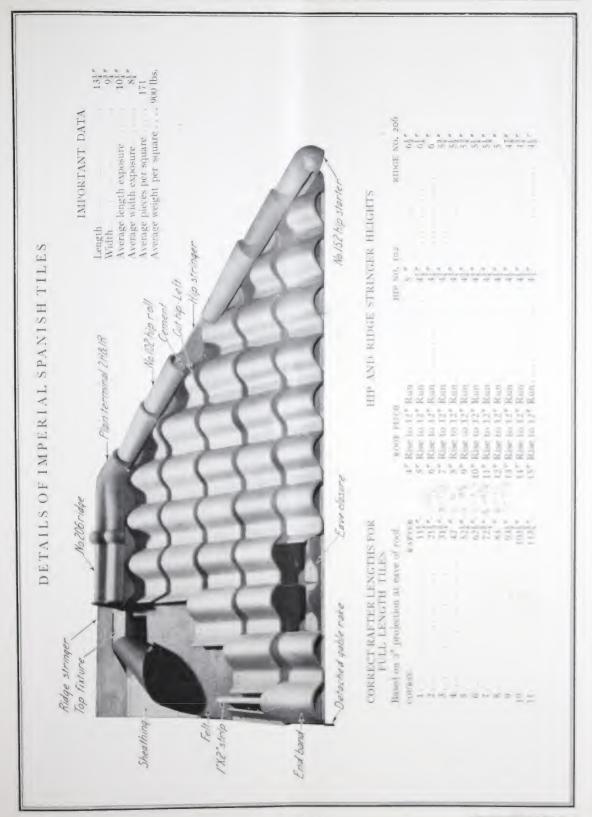
Note: Include (6g) on circular roofs.

(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

Details concerning any roofing problem furnished on request. If additional copies of this catalogue are desired, please write.

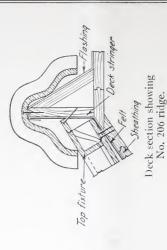




# DETAILS OF IMPERIAL SPANISH TILES AND FITTINGS

Deck section showing flashing over top of tiles.

Hip section showing No. 102 hip roll.



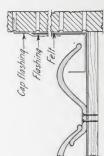
Cant strip

Deck section showing No. 206 deck mould-raised flange.

Section showing flashing under 3" Flat Shingle Tiles.

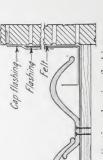
ailing strip for endband

Special eave closure

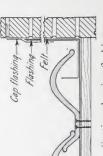


Cap flashin

Section showing flashing under side of tiles.



Section showing flashing over top of tiles.







Section showing left gable rake and end band.

SWEET'S

PAGE 25

Deck section showing No. 206 cut-off ridge and 3"x4" scuppers draining deck.

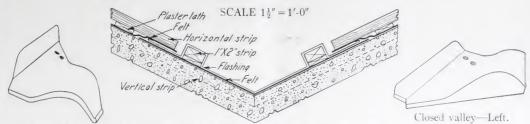
Continued on next page

Section showing end band over concealed gutter.

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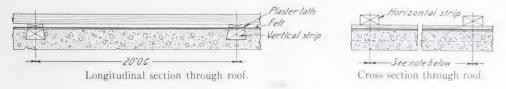
## DETAILS OF IMPERIAL SPANISH TILES AND FITTINGS

APPLICATION OVER CONCRETE



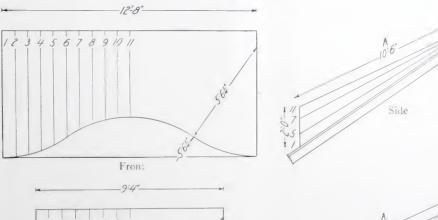
Cut hip-Left.

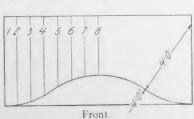
Section showing valley flashing on concrete roof base.



Application of wood strips to concrete roof base. Exact spacing of horizontal strips determined by shade of tiles.

## DIAGRAM OF EYEBROW DORMERS SCALE $\frac{1}{4}'' = 1'-0''$





Eyebrow dormers must be constructed as shown above for Spanish tiles. Rafters and sheathing must show a straight line from the curved eave to the point directly above where it joins main roof and on a line with the point where center line of eyebrow meets main roof. See front elevation.



Larger or smaller effects can be secured providing vertical height and radii shown are increased or decreased proportionately.

Distance "A" should not be decreased and it must be increased when roof pitch is steeper than 12" rise in 12" run.

# DE IMPERIAL ROMAN AND GREEK TILES

## LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

## ROMAN TILES



These patterns are available in a range of colors in a variety of surface textures.

## GREEK TILES



## SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications.

Note: Words in italics enclosed within parentheses are selective to suit particular condition. Include or omit

Note: Clauses are selective. Include or omit as they

## (1) Tiles

(la) Cover roofs so indicated with Ludowici-Celadon Company's Imperial (Roman) (Greek) tiles and fittings of

(1b) (Hips shall be cut) (and) valleys shall be cut and closed before burning.

### (2) Nails

All nails for flashings and tiles shall be copper.

## (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 2½" horizontally and 6" vertically. Fasten with large-headed galvanized nails.

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

## (4) Wood Strips

(4a) Provide 1" x 2\\$" strips under covers and 1" stringers of necessary height under (hip rolls and) ridges.

(4b) Embed parallel with the pitch on 20" centers

(4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit pan tiles.

Note: Include (4b) if roof base is concrete.

## (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \(\frac{1}{4}\)". Lap joints at least 4". Fasten with cleats. Do not solder.

(5b) At sides of vertical surfaces, extend base flashing at least 6" up wall, 4" under tiles and turn up edge 2".

(5c) At fronts, extend flashing at least 3" up wall and 4" over tiles.

(5d) Masonry wall shall be cap flashed and pointed.

(5e) Where tile and metal roofs intersect, extend metal up tile roof 12" or more.

(5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

## (6) Laying

(6a) Lay tiles to straight lines, parallel and at right angles to eaves, lapped 3". Fasten with 1½" copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement.

(6b) Leave opening of 6" or more across valleys.

(6c) Cement gable rakes to field tiles and fasten with  $2\frac{1}{2}$ " copper nails.

 $(6d)\,$  Cement hip rolls in laps and fasten with 2'' copper nails.

(6e) Cement ridges in laps and fasten with  $2\frac{1}{2}^{\prime\prime}$  copper nails.

(6f) Where tiles join hip stringers make waterproof with elastic cement.

(6g) Cement small pieces of graduated tiles solidly with elastic cement.

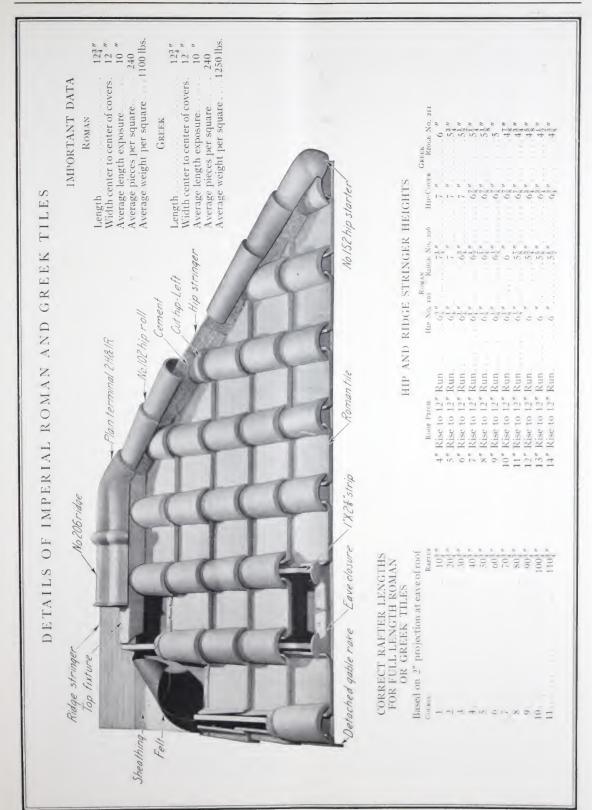
Note: Include (6g) on circular roofs.

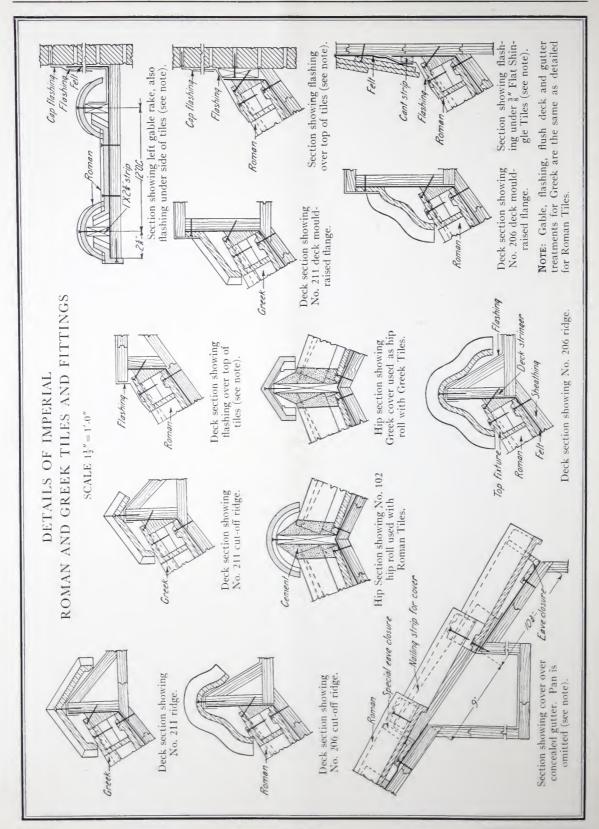
(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

Details concerning any roofing problem furnished on request. If additional copies of this catalogue are desired, please write.

DETAILS





Makers of IMPERIAL Floor Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

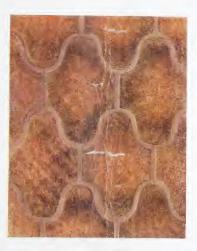
Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

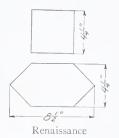
## FLOOR TILES

These shapes, in colors and textures originally manufactured for individual work of certain architects from their own designs, are now produced in quantities allowing their more general use. They are moderately priced.









## PIECES PER SQUARE FOOT

Based on 1" mortar joint.

Provence, 3.86 Valencia, 4.28

\*Renaissance, squares, 1.88

\*Renaissance, hexagons, 3.76

\*Based on design showing square surrounded by hexagons.





## IMPERIAL ROOFING TILES

## LUDOWICI-CELADON COMPANY

CHICAGO - 104 South Michigan Avenue

NEW YORK-565 Fifth Avenue WASHINGTON-738 Fifteenth Street, N.W.

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

## SPANISH TILES

This pattern is available in a range of colors in a variety of surface textures

## SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications.

Note: Words in italics enclosed within parentheses are selective to suit particular condition. Include or omit as required.

Note: Clauses are selective. Include or omit as they apply.



## (5b) At sides of vertical surfaces, extend base flashing at least 6'' up wall, 4'' under tiles and turn up edge $1\frac{1}{2}''.$

- (5c) At fronts, extend flashing at least 3" up wall and 4" over tiles.
- (5d) Masonry wall shall be cap flashed and pointed.

## (1) Tiles

- (1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial Spanish tiles and fittings of (specify)
- $(1b) \ (Hips\ shall\ be\ cut)\ (and)\ valleys\ shall\ be\ cut\ and\ closed\ before\ burning.$

## (2) Nails

All nails for flashings and tiles shall be copper.

## (3) Felt

- (3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 2½" horizontally and 6" vertically. Fasten with large-headed galvanized nails
- (3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

## (4) Wood Strips

- (4a) Provide  $1'' \times 2''$  strips under end bands and 1'' stringers of necessary height under (hip rolls and) ridges.
- (4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips speed to suit tiles

Note: Include (4b) if roof base is concrete.

## (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \( \frac{1}{4}" \). Lap joints at least 4". Fasten with cleats. Do not solder.

- (5e) Where tile and metal roofs intersect, extend metal up tile roof  $12^{\prime\prime}$  or more.
- (5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

## (6) Laying

- (6a) Lay tiles to straight lines, parallel and at right angles to eaves, lapped 3". Fasten with 1½" copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement.
  - (6b) Leave opening of 6" or more across valleys.
- (6c) Cement gable rakes to field tiles and fasten with  $2\frac{\imath}{2}''$  copper nails.
- $(\mathbf{6d})$  Cement hip rolls in laps and fasten with  $2^{\prime\prime}$  copper nails.
- (6e) Cement ridges in laps and fasten with  $2\frac{1}{2}''$  copper nails.
- (6f) Where tiles join hip stringers make waterproof with elastic cement.
- (6g) Cement small pieces of graduated tiles solidly with elastic cement.

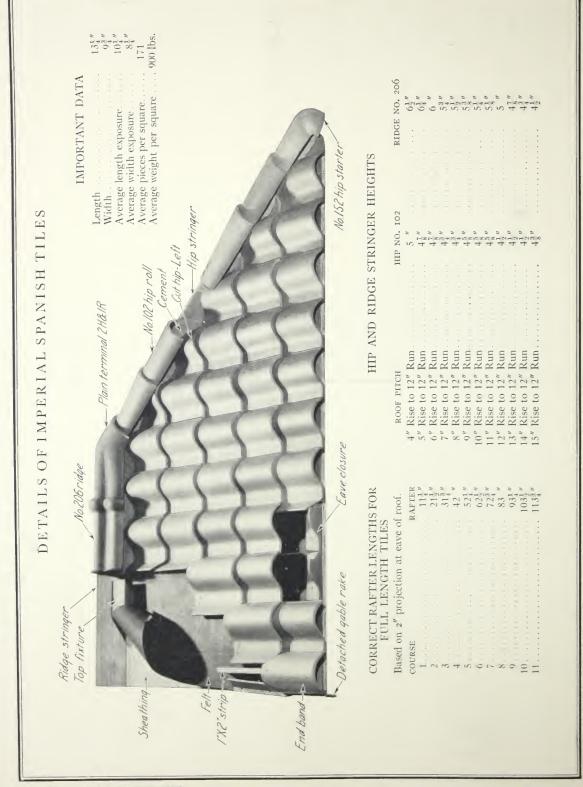
Note: Include (6g) on circular roofs.

(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

Details concerning any roofing problem furnished on request. Other patterns shown in folders I-1, I-2, I-3, I-4 and I-6.

Imperial SPANISH Roofing Tiles—A.I.A. File 12-e
LUDOWICI-CELADON COMPANY—I-5



DETAILS OF IMPERIAL SPANISH TILES

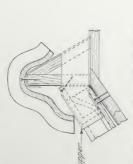
flashing over top of tiles.

# DETAILS OF IMPERIAL SPANISH TILES AND FITTINGS

SCALE  $1\frac{1}{2}'' = 1'-0''$ 



Hip section showing No. 102 hip roll.



Deek section showing No. 206 cut-off ridge and 3"x4" scuppers draining deck.



Cant strip.

Fell

Deck section showing No. 206 deck mould-raised flange.

Section showing flashing under § "Flat Shingle Tiles.

Wailing strip for endband

Special eave closure



Deck section showing No. 206 ridge.



Cap Flashing Felt Cap flashing-Flashing

Section showing flashing under side of tiles.

Section showing left gable rake and end band.





Section showing flashing over top of tiles.

LUDOWICI-CELADON COMPANY

Section showing end band over concealed gutter.

12-

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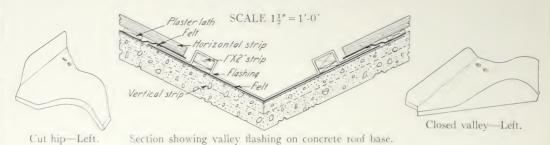
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### DETAILS OF IMPERIAL SPANISH TILES AND FITTINGS

### APPLICATION OVER CONCRETE



Plaster lath
Felt
Vertical strip

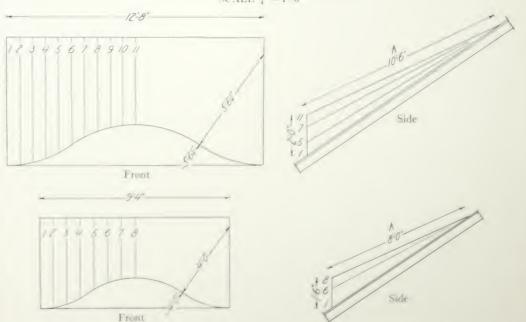
Longitudinal section through roof.



Application of wood strips to concrete roof base. Exact spacing of horizontal strips determined by shade of tiles.

### DIAGRAM OF EYEBROW DORMERS

SCALE  $\frac{1}{4}'' = 1'-0''$ 



Eyebrow dormers must be constructed as shown above for Spunish tiles. Rafters and sheathing must show a straight line from the curved eave to the point directly above where it joins main roof and on a line with the point where center line of eyebrow meets main roof. See front elevation.

Larger or smaller effects can be secured providing vertical height and radii shown are increased or decreased proportionately.

Distance "A" should not be decreased and it must be increased when roof pitch is steeper than 12" rise in 12" run.

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

### SHINGLE TILES

These patterns are available in a range of colors in a variety of surface textures

### SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications,

Note: Words in italics enclosed within parentheses are selective to suit particular condition. Include or omit as required.

Note: Clauses are selective. Include or omit as they apply.

### (1) Tiles

(1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial (specify pattern) Shingle tiles and fittings of (specify) color.

(1b) (Hips) (and) (valleys) shall be cut before burning.

### (2) Nails

All nails for flashings and tiles shall be copper.

### (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 2½ horizontally and 6" vertically. Fasten with large-headed galvanized nails.

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

### (4) Wood Strips

(4a) Provide <sup>a</sup>" x 1" cant strips at eaves and 1" stringers of necessary height under (hip rolls and) ridges.

(4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit tiles.

Note: Include (4b) if roof base is concrete.

### (5) Flashings

(5a) At sides of vertical surfaces, insert base flashing between each course of tiles. Lap 3" and extend 4" under tiles and at least 6" up wall.

(5b) At fronts, extend flashing at least 3'' up wall and 4'' over tiles.

(5c) Masonry wall shall be cap flashed and pointed.

(5d) Where tile and metal roofs intersect, extend metal up tile roof 12" or more.

(5e) Extend gutter metal up roof to a point higher than outer edge of gutter.

(5f) Open Valleys – Line valleys with 16 oz. copper at least 20" wide. Turn edge over  $\frac{1}{4}$ ". Lap joints at least 4". Fasten with cleats. Do not solder.

(5g) Closed Valleys—Flash between each course of tiles with  $16^{\prime\prime}$  strips of same length as tiles.

(5h) Rounded Valleys Flash between each course of tiles with curved strips of same length as tiles. Extend strips 8" beyond the curve at either side of valley.

### (6) Laying

(6a) Lay tiles (regular) (irregular) with (specify) average exposure and not less than 2" head lap on the third course. Double tiles at eave. Fasten with (1\frac{1}{4}") (1\frac{1}{4}") (specify) copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement.

Note: Select whether regular or irregular and specify 1½" nails for ¾" shingles; 1¾" nails for ¾" shingles; longer for thicker shingles.

(6b) Leave opening of 6" or more across valleys

(6c) Cement end bands in laps.

(6d) Cement hip rolls in laps and fasten with 2" copper nails.

(6e) Cement ridges in laps and fasten with 21 copper nails.

(6f) Where tiles join hip stringers make waterproof with elastic cement.

(6g) Cement small pieces of graduated tiles solidly with elastic cement.

Note: Include (6g) on circular roofs.

(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

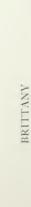
Details concerning any roofing problem furnished on request. Other patterns shown in folders 1-2, 1-3, 1-4, 1-5 and 1-6.

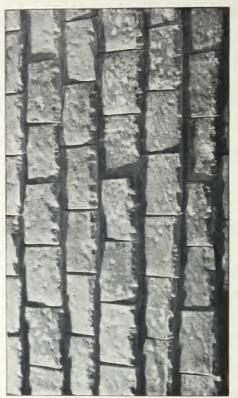
LUDOWICI-CELADON COMPANY—I-

# IMPERIAL SHINGLE TILES





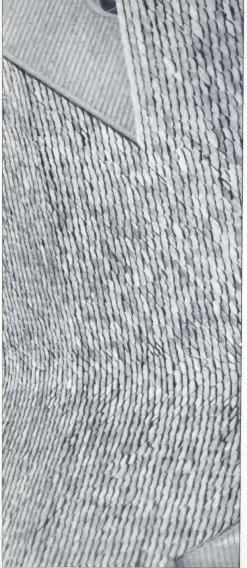








Brittany Shingle Tiles



Vale Memorial Tiles

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Faster

angles

### DETAILS OF IMPERIAL $\frac{3}{8}$ " FLAT AND $\frac{5}{8}$ " SLAB SHINGLE TILES AND FITTINGS

SCALE  $1\frac{1}{2}'' = 1'-0''$ 

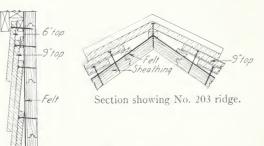
### IMPORTANT DATA



<sup>3</sup> / <sub>8</sub> " Flat Shingle Tiles
Length
Width
Average exposure 6"x5"
Average pieces per square 480
Average weight per square. 1225 lbs.
5" SLAB SHINGLE TILES



//	Licit Cit
3/	Width
//	Average exposure $6\frac{1}{4}$ "x5"
	Average pieces per square 461
at Shingle Tile.	Average weight per square. 1780 lbs.





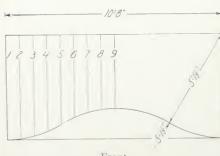
No. 111 Hip roll.

Siding corner

-6 under eave Flashing Section A-A.

Cross section showing valley flashing on wood roof base. See specifications.

Aw Elevation showing 3" Flat Shingle Tiles.



Side

SCALE  $\frac{1}{4}$ " = 1'-0" for eyebrow detail only.



Front

Eave section showing gutter construction.

Eyebrow dormers must be constructed as shown above for 5" Slab Shingle Tiles. Rafters and sheathing must show a straight line from the curved eave to the point directly above where it joins main roof and on a line with the point where center line of eyebrow meets main roof. See front elevation.

Larger or smaller effects can be secured providing

vertical height and radius shown are increased or decreased proportionately. Distance "A" should not be decreased and it must be increased when roof pitch is steeper than 12" rise in 12" run.

Crowd tiles at top of dormer and spread them at eave. Shorten exposure of tiles as they leave main roof until tail lines of tiles on both surfaces are aligned.

Imperial INTERLOCKING SHINGLE

COMPANY-1-2

Roofing Tiles-A.I.A. File 12-e

LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

### INTERLOCKING SHINGLE TILES



CLOSED SHINGLE

These patterns are available in a range of colors in a variety of surface textures.



ENGLISH SHINGLE

### SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications.

Note: Words in italics enclosed within parentheses are selective to suit particular condition. Include or omit as required.

Note: Clauses are selective. Include or omit as they apply.

### (1) Tiles

(1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial (Closed) (English) Shingle tiles

and fittings of (specify) color.

(1b) (Hips) (and) (valleys) shall be cut before burning.

### (2) Nails

All nails for flashings and tiles shall be copper.

### (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 24' horizontally and 6" vertically. Fasten with large-headed galvanized nails

(3b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

### (4) Wood Strips

(4a) Provide  $\frac{\pi}{8}$ " x 1" cant strips at eaves. Note: Include (4a) if English Shingles are specified. (4b) Provide 1" stringers of necessary height under (hip rolls and) ridges.

(4c) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit tiles.

Note: Include (4c) if roof base is concrete.

### (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \display". Lap joints at least 4". Fasten with cleats. Do not solder.

(5b) At sides of vertical surfaces, extend base flashing at least 6" up wall, 5" under tiles and turn up edge 1".

(5c) At fronts, extend flashing at least 3" up wall and 4" over tiles.

(5d) Masonry wall shall be cap flashed and pointed.

(5e) Where tile and metal roofs intersect, extend metal up tile roof 12" or more.

(5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

### (6) Laying

(6a) Lay tiles to straight lines, parallel and at right angles to eaves, lapped 3". Fasten with 2" copper nails. Fasten tiles overlapping sheet metal with copper wire and

(6b) Leave opening of 6" or more across valleys.

(6c) Cement gable rakes to field tiles and fasten with 2" copper nails.

(6d) Cement hip rolls in laps and fasten with 2" copper nails.

(6e) Cement ridges in laps and fasten with  $2\frac{1}{2}$ " copper nails.

(6f) Where tiles join hip stringers make waterproof with elastic cement.

(6g) Cement small pieces of graduated tiles solidly with elastic cement.

Note: Include (6g) on circular roofs.

(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

Note: Include (6h) on high buildings.

Details concerning any roofing problem furnished on request. Other patterns shown in folders I-I, I-3, I-4, I-5 and I-6.

# HIP AND RIDGE STRINGER HEIGHTS

CORRECT RAFTER LENGTHS FOR FULL LENGTH TILES Based on 2" projection at eave of roof.

CLOSED SHINGLE 9" 9" 17" 25" 33" 441" 49" 557" 65"

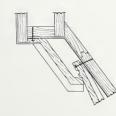
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DETAILS OF IMPERIAL INTERLOOMING SHINGLE TILES AND FITTINGS

# DETAILS OF IMPERIAL INTERLOCKING SHINGLE TILES AND FITTINGS

SCALE  $1\frac{1}{2}'' = 1'-0''$ 

Cant strip



Deck section showing

No. 211 ridge.

Cap Flashing Flashing-Felt-

Deck section showing mould-raised flange. No. 211 deck

Section showing flashing under side of tiles.

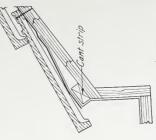


Deck section showing No. 211 cut-off ridge.

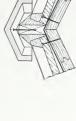


Section showing flashing under § " Flat Shingle Tiles.

Deck section showing flashing over top of tiles.



Section showing gutter construction for English Shingle Tiles.

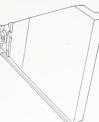


Hip section showing No. 120 hip roll used with English Shingle Tiles.

Hip section showing No. 118 hip roll used with Closed Shingle Tiles.

Section showing right gable rake and end band.

. Under eave



Section showing flashing

over top of tiles.



Cut hip—Left.





Cut valley-Right.

(1)

ing. (2)

(3)

and 6

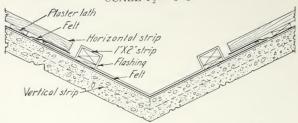
nails.

angle space

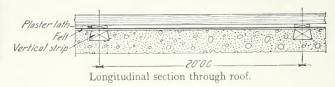
With

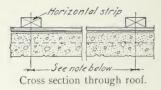
# DETAILS OF IMPERIAL INTERLOCKING SHINGLE TILES AND FITTINGS

APPLICATION OVER CONCRETE SCALE  $1\frac{1}{2}'' = 1'-0''$ 



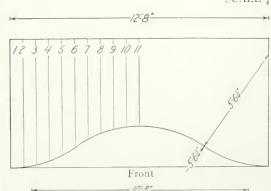
Section showing valley flashing on concrete roof base.

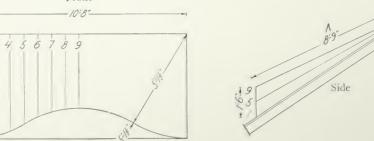




Application of wood strips to concrete roof base. Exact spacing of horizontal strips determined by shade of tiles.

DIAGRAM OF EYEBROW DORMERS SCALE  $\frac{1}{4}'' = 1'-0''$ 





Eyebrow dormers must be constructed as shown above for Closed Shingle Tiles. Rafters and sheathing must show a straight line from the curved eave to the point directly above where it joins main roof and on a line with the point where center line of eyebrow meets main roof. See front elevation.

Larger or smaller effects can be secured providing

vertical height and radii shown are increased or decreased proportionately. Distance "A" should not be decreased and it must be increased when roof pitch is steeper than 12" rise in 12" run.

Side

Note: For English Shingle tiles, eyebrow width and distance "A" must be increased 2'-0". The height remains the same.

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at 10 W CXXVIII ON ONO-CONTENTION KXVIII-TOO, KXVIII

### FRENCH TILES

This pattern is available to a range of colors

### SPECIFICATIONS

Note: Note: are explanelary or advisory arely and should not be included in the specifications

Note: Words in statics enclosed within parentheses are infective to suit particular condition. Include or omit as required

Note, Character who the In-

### (1) Tiles

(Ia) Cover roots so indicated with Ludowici Celadan Company's Imperial French tiles and fittings at tipes (iv) color

(1b) (Hips) (and) (nulleys) shall be cut before butning

### (2) Nails

All nails for flashings and tiles shall be copper-

### (3) Felt

(3a) Lay asphalt felt weighing 10 (by per square, doubled on (how penalty) (rough confused) (hope) (safely) (conf) ridges. Lay parallel the aver. Lag 24 horizontally and 6' vertically. Fasten with large-boxied galvanius) calls.

(3b) Extend telt (of up vertical walls) (and) 4" uver (gatter) (and) (valler) metal.

### (4) Wood Strips

(4a) Provide 15a\*x2" cant strips at saves and 1" stringers of necessary height under (seg rolls and) ridges

(4b) Embed parallel with the pirch on 20° centures 1° x 2° bevelod wood strips than with surface of comprete. Faster felt with lath railed over these strips. At right angles to embedded strips, over lath, install 1° a 2° strips spaced to sult tifes.

Note: Include lab! If real hear is presente.

### (5) Flashings

(Sa) Line valleys with 15 on copper at least 4". Factors with cleans. Do not soldier

(36) As order of section controver, extend have fluiding at lead to up wall, 5" units tiles and torn uprates 4".

(Sc) At 1999th, estand thatbing at least 4" up wall and 4" over this

(8d) Manuer wall thall be rapflashed and provided

(Sa) Where tile and metal contributes watern't watern't metal on the cond \$2" or more

(SI) Latent gather curred up tool to a point higher chan mater reign of groves

### 6 Laying

(6a) Law tiles are everages times, perullet and at pight angles to recens lapped to Factor with Lift coppes mails. Factor tiles overlapping shout motal with copper wice and which compare the

inb! Lerve opening of the more arress valles a

(6c) Comme gable takes to tabl they and fasters with 2" copped matter

(6d) Commit hip rulls by tape each tasken with 2° copper male.

(66) Cemant ridges in laps and lasters with 21° cupper hash.

(M) Where this your hip alriagers make waterment with elastic corners.

(6g) I ement small pieces of graduated tiles solidly with elastic content.

Note: Include (tig) on partial results

(6b) Cented all tiles in Japa using 40 for of elastic content per aquate.

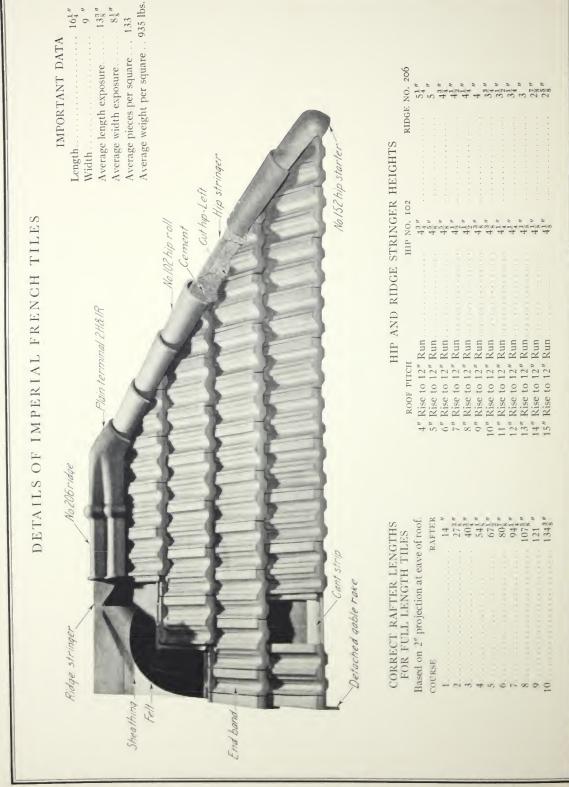
(60) Copper stamp shall be placed to side lock of each tile at point discrify above band of tile below. Suil charge to your base.

Note: Imbale color (Sh) or (ti) or high buildings.

Delaths concerning any reading problem formulad on requisit.

Other publishers shown in fablish E.J., E.S. J.-J., E.S. and E.S.

AN PRESCRIPTION OF THE PARTY IN



DETAILS OF IMPERIAL

T.

ROOFING-TILES, CLAY, IMPERIAL LUDOWICL-CELADON COMPANY

0 ..

Comparison (2)

Imperial MISSION Roofing Tiles—.1.I.A.

File

## LUDOWICI-CELADON COMPANY

Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

### MISSION TILES

These patterns are available in a range of colors in a variety of surface textures

### SPECIFICATIONS

Note: Notes are explanatory or advisory only and should not be included in the specifications

ed in the specifications.

Note: Words in italics enclosed within parentheses are selective to suit particular condition. Include or omit as required.

Note: Clauses are selective. Include or omit as they apply.



(5b) At sides of vertical surfaces, extend base flashing at least 6" up wall, 4" under tiles and turn up edge 2".

(5c) At fronts, extend flashing at least 3'' up wall and 4'' over tiles.

(5d) Masonry wall shall be cap flashed and pointed.

### (1) Tiles

(1a) Cover roofs so indicated with Ludowici-Celadon Company's Imperial (specify pattern) Mission Tiles and fittings of (specify) color.

(1b) Covers shall be used as (hip roll and) ridge.
(1c) (Hips shall be cut) (and) valleys shall be cut and closed before burning.

### (2) Nails

All nails for flashings and tiles shall be copper.

### (3) Felt

(3a) Lay asphalt felt weighing 30 lbs. per square, doubled on (low pitches) (rough surfaces) (hips) (valleys) (and) ridges. Lay parallel to eaves. Lap 2½" horizontally and 6" vertically. Fasten with large-headed galvanized pails

(?b) Extend felt (6" up vertical walls) (and) 4" over (gutter) (and) (valley) metal.

### (4) Wood Strips

(4a) Provide 1" strips of necessary height under covers (hip rolls) and ridges.

(4b) Embed parallel with the pitch on 20" centers 1" x 2" beveled wood strips flush with surface of concrete. Fasten felt with lath nailed over these strips. At right angles to embedded strips, over lath, install 1" x 2" strips spaced to suit pan tiles.

Note: Include (4b) if roof base is concrete.

### (5) Flashings

(5a) Line valleys with 16 oz. copper at least 20" wide. Turn edge over \{". Lap joints at least 4". Fasten with cleats. Do not solder.

(5e) Where tile and metal roofs intersect, extend metal up tile roof 12'' or more.

(5f) Extend gutter metal up roof to a point higher than outer edge of gutter.

### (6) Laying

(6a) Lay tiles (regular) (irregular) exposure with not less than 3" lap. Fasten with 2" copper nails. Fasten tiles overlapping sheet metal with copper wire and elastic cement.

(6b) Irregular Effect—Lay pans at actual exposure. Vary exposures of covers to avoid horizontal and diagonal lines using 10% additional covers.

(6c) Leave opening of 6" or more across valleys.

(6d) Cement gable rakes to field tiles and fasten with  $2\frac{1}{2}^{\prime\prime}$  copper nails.

(6e) Cement (hip rolls) (and) (ridges) in laps and fasten with 2½" copper nails.

(6f) Where tiles join hip stringers make waterproof with elastic cement.

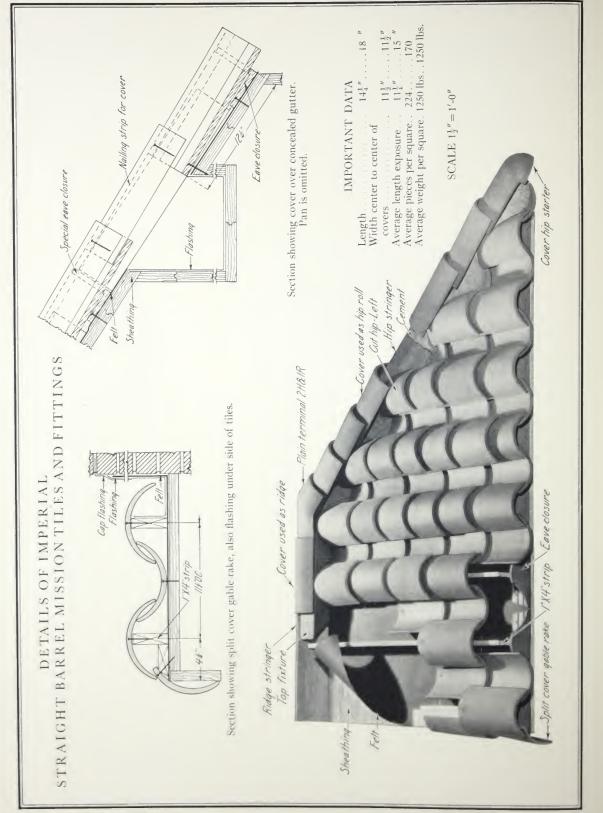
 $(\mathbf{6g})$  Cement small pieces of graduated tiles solidly with elastic cement.

Note: Include (6g) on circular roofs.

(6h) Cement all tiles in laps, using 30 lbs. of elastic cement per square.

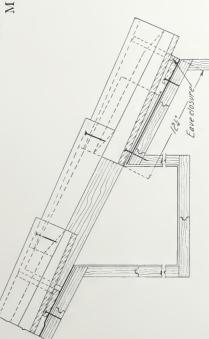
Note: Include (6h) on high buildings.

Details concerning any roofing problem furnished on request. Other patterns shown in folders I-1, I-2, I-3, I-5 and I-6.



DETAILS OF IMPERIAL SMALL TAPERED

LUDOV



. 1380 lbs.

SMALL TAPERED COVERS AND 141" STRAIGHT BARREL PANS

SMALL TAPERED PANS AND COVERS

Width center to center of covers

Length

Average length exposure... Average pieces per square Average weight per square

IMPORTANT DATA

14<sup>1</sup>/<sub>4</sub>"

1111 " 1114 " 128

1350 lbs

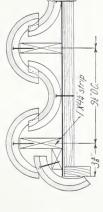
SCALE  $1\frac{1}{2}'' = 1'-0''$ 

Average pieces per square, pans ... Average pieces per square, covers Average weight per square

Width center to center of covers Average length exposure, pans ... Average length exposure, covers

Length, pan . Length, cover

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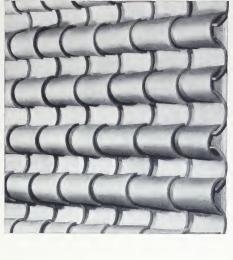


Section showing Small Tapered pans and covers, also split cover gable rake.



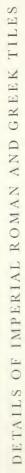
Section showing Small Tapered covers with 14<sup>‡"</sup> Straight Barrel pans, also split cover gable rake.

Small Tapered pans and covers.



Small Tapered covers and Straight Barrel pans.

12-e



IMPORTANT DATA  ROMAN  Length  Width center to center of covers. 12"  Average length exposure. 10"	c overs.	Average pieces per square	MotS2 hip starter
Ridge stringer Top fixture Plain terminal 2H&HR	The state of the s		Detached gable rake   Eave closure   IXE strip   Romantile

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AND RIDGE STRINGER HEIGHTS

Based on 2" projection at eave of roof.	200
	PITCH HIP NO. 102 RIDGE NO. 206 HIP-COVER
103"	o 12" Run 63" 71"7 ".
203 "	o 12" Run 61" 7 " 7 "
303"	Rise to 12" Run 64" 63" 7 ".
403"	Rise to 12" Run $6_1'''$ $6_2'''$ $6_2'''$
203	Rise to 12" Run 61" 61" 67".
" £009	9" Rise to 12" Run 61" 61" 67" 5 "
7.03"	Rise to 12" Run 61," 6 " 67"
% CO3	Rise to 12" Run 61" 57".
, 206 , 206	Kise to 12" Run. 6". 53" 63".
1003 "	Rise to 12" Run 6"55"
1103"	Rise to 12" Run 6 " 51" 63"

DETAILS OF IMPEDIAL

ROOFING-TILES, CLAY, IMPERIAL

LUDOWICL CELADON COMPANY



Makers of IMPERIAL Roofing Tiles

CHICAGO, 104 South Michigan Avenue

NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

### TILE SLABS

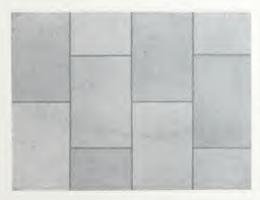


In addition to shale red colors, tile slabs are manufactured in a range of browns and fire-flashed shades.

A complete line of tile slab fittings is available.

### NUMBER OF PIECES PER SQUARE

Mortar Joint	6"x6"x1"	6"x9"x1"	9"x9"x1"
8	384	258	., . 173
		250	
8	355,	241	164
2 "	341	234	160



6"x9"x1"



6"x6"x1"



### GARDEN WALK EDGING

Made in red, fire-flashed and black. Placed in the ground along walks or driveways it makes an interesting and practical edging for lawns or flower borders.

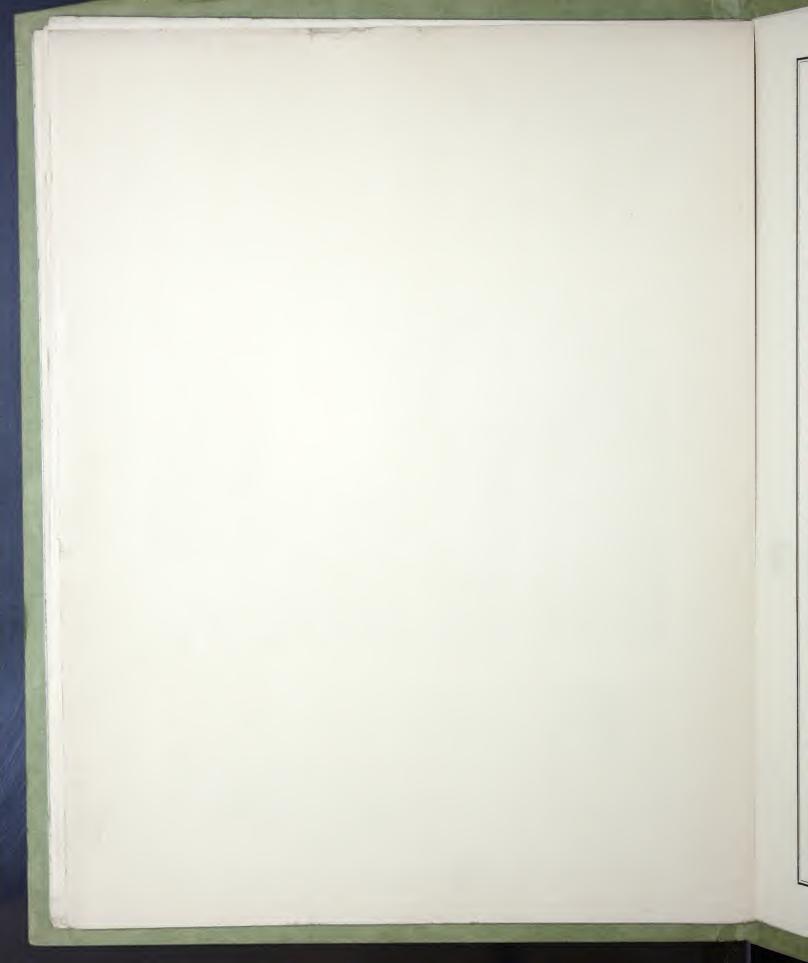
TILE FLAGGING

Made in a variety of colors. The texture suggests that of old stone flagging.

Size approximately 9"x12"x1\frac{1}{4}".



PRINTED IN U.S.A.



NEW YORK, 565 Fifth Avenue

WASHINGTON, 738 Fifteenth Street, N. W.

Factories located at NEW LEXINGTON, OHIO—COFFEYVILLE, KANSAS—PERU, KANSAS

### CHIMNEY POTS

Chimney pots are made in various textures and colors especially adapted to use with our weathered effect tiles. They are also available in glazed colors for the modern treatment.



C.P.200



C.P.500, 510 and 520





C.P.600, 610, 620, 630, 640, 650 and 660

NUMBER C.P.200, 7 C.P.300 8 C.P.310 12 C.P.320 15 C.P.400 8 C.P.410 12 C.P.420 15 C.P.500 8 C.P.500 12	" Vara de la	13 "x13" 14 " 18 " 21 " 14½" 18½" 14 "	15" 18" 21" 25" 25" 29" 32"
C.P.520 15 C.P.600 10 C.P.610 12 C.P.620 15 C.P.630 18 C.P.640 23 *C.P.650 8 *C.P.660 12	" Dia. " " Tia. "	13 " 15 " 18 " 21½" 26 "	15" 18" 20" 30" 30"

SCHEDULE OF SIZES



C.P.400, 410 and 420

C.P.300, 310 and 320



Makers of IMPERIAL Floor Tiles

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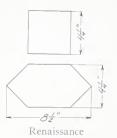
### FLOOR TILES

These shapes, in colors and textures originally manufactured for individual work of certain architects from their own designs, are now produced in quantities allowing their more general use. They are moderately priced.









### PIECES PER SQUARE FOOT

Based on 1" mortar joint.

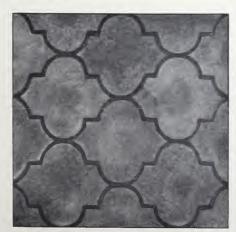
Provence, 3.86

Valencia, 4.28

\*Renaissance, squares, 1.88

\*Renaissance, hexagons, 3.76

\*Based on design showing square surrounded by hexagons.







# WASHINGTON, D. C. OKLAHOMA CITY, OKLA. EPRODUCE THE

### LUDOWICI-CELADON COMPANY

Makers of "Ludowici" Roofing Tiles

NEW YORK, N. Y. CLEVELAND, OHIO

104 South Michigan Avenue CHICAGO, ILL.

# AUTHENTIC IN EVERY DETAIL, LUDOWICI TILES FAITHFULLY REPRODUCE THE EFFECT OF OLD WORLD ROOFS

### Products

LUDOWICI ROOFING TILES.
LUDOWICI CHIMNEY POTS.
LUDOWICI GARDEN WALK EDGING.
LUDOWICI TILE SLABS.
LUDOWICI TILE FLAGGING.

### Manufacture

From the Ludowici clay pits of Ohio and Kansas come the finest clays obtainable. These clays, under our special manufacturing methods, produce hard-burned roofing tiles of non-reflective texture, whose soft, rich colors are obtained in the burning process—hence are permanent.

### Texture

Ludowici Shingle Tile reproduce with historic accuracy the crude, rugged charm of the French farmhouse and the English countryside roofs, and give the required feeling of weight your design demands. The Colonial shingles reproduce in every detail the texture and color of old, hand-split wood shingles.

hand-split wood shingles.

Closed Shingle, English Shingle,
Mission, Spanish, Roman, Italian,
and Greek tiles are also produced in
various textures, including weathered
surface effects.

Variations in great number, both as to color and texture can be had to meet the individual requirements of architectural design and taste.



### Colors

Ludowici Shingle tiles are produced in a wide variety of colors, ranging from light tans and buffs through varying reds, browns and purples, to greys, brownish blacks and dark weathered greens.

Ludowici Spanish, Mission, French, English Shingle, Closed Shingle, Roman, Italian, and Greek tiles are offered in natural reds and fireflashed shades, or glazes of most any color-

### Permanence and Durability

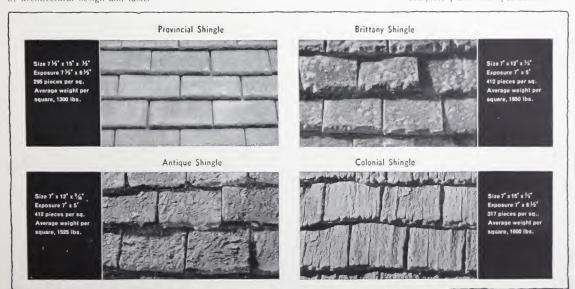
A roof of Ludowici tiles will last as long as the building it covers. Once laid, it provides a permanently beautiful, weathertight and fireproof roof, with distinct insulating qualities; assures lifelong protection without the expense of painting or repairs.

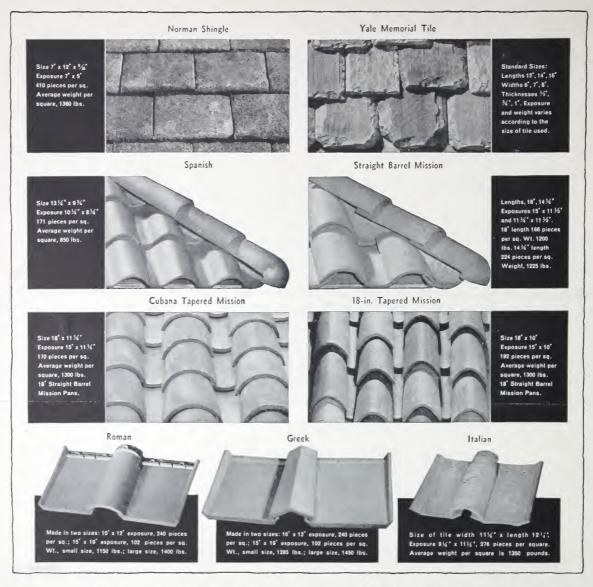
### Reasonable in Cost

A Ludowici tile roof is moderate in price, and can be installed without any special framing for the substructure.

### Service to Architects

We invite you to write or call your nearest Ludowici representative for samples of tile, complete specifications, and for aid on any roofing problem you may have. Estimates promptly furnished from architects' complete plans and specifications.





# LUDOWICI CHIMNEY POTS FOR USE WITH WEATHERED-EFFECT TILES Chimney pots are made to fit standard flue



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